

**U.S. Fish & Wildlife Lab Information, Analytical Pricing, QA/QC and methods (see discussion and listed websites below with other lab info related sites and access to F & W specialists).**

Since the FWS process is now offered to other DOI agencies, piggy backing on them and/or USGS is the best. NOAA would be fine for marine, but their info doesn't seem to be as available and they are not DOI. The GERG lab as been giving Parks standard FWS prices and QA/QC, so there is no muss, no fuss, and you get instant data comparability with the FWS on all their contaminants data.

[http://www.fws.gov/chemistry/acf\\_labs.html](http://www.fws.gov/chemistry/acf_labs.html)

<http://www.epa.gov/ttn/nelac/accreditlabs.html>

National Water Quality Monitoring Council position paper with justification for advocating Performance Based Measurement Systems:

<http://wi.water.usgs.gov/pmethods/PBMS/nwqmc.0102.pdf>

<http://www.epa.gov/ost/fishadvice/volume1/v1ch8.pdf>

Take a look at the FWS information:

**The best of these programs typically require not only paper checks to ensure that QA/QC programs are in place, but also require candidate labs to demonstrate adequate performance on analyses of blind samples in an inter-laboratory round-robin analyses of an NIST-certified or other high quality reference materials.**

The Fish and Wildlife Service (FWS) runs such a program out of West Virginia (moved from Patuxent, MD, for a list of FWS approved contract laboratories pricing, contaminants analyzed etc., see [http://www.fws.gov/chemistry/acf\\_labs.html](http://www.fws.gov/chemistry/acf_labs.html)). Metals, Pesticides, Herbicides, PAHs, BTEX compounds, Dioxins and other parameters (not nutrients) are analyzed in water, sediments, and tissues. The Fish and Wildlife Service (FWS) is a sister agency to the National Park Service within the same directorate within the Department of Interior. In the last few years, at least some of these FWS labs have given the NPS Fish and Wildlife Service prices and QA/QC specifications (check with each lab to confirm). For QA/QC, see [http://www.fws.gov/chemistry/acf\\_gaqc.html](http://www.fws.gov/chemistry/acf_gaqc.html). For organic compound statements of work, see [http://www.fws.gov/chemistry/acf\\_org\\_sow.html](http://www.fws.gov/chemistry/acf_org_sow.html). For inorganic compound statement of work, see [http://www.fws.gov/chemistry/acf\\_inorg\\_sow.html](http://www.fws.gov/chemistry/acf_inorg_sow.html).

The FWS also produces considerable contaminants data at Wildlife Refuges, and using FWS approved contract labs and QA/QC specifications is one logical way to ensure data comparability with these other Department of Interior datasets (Check with the contaminants specialist in your nearby FWS Field Office for information on ECDMS data base ([http://www.fws.gov/chemistry/acf\\_ecdms.html](http://www.fws.gov/chemistry/acf_ecdms.html))).

For more detail see discussion in WRD Water Quality Guidance Part B/Part B lite, see section on: **Selection of a Chemical Lab (if applicable).**

**One of the biggest mistakes a monitoring team can make is to choose a lab that has not passed difficult and independent state and Federal (Federal National Environmental Laboratory Accreditation Program or NELAP, see <http://www.epa.gov/ttn/nelac/accreditlabs.html>)**

**Significant inconsistencies (much greater than 20% RPD) were also found for water column concentrations of TKN and certain metals ([http://wi.water.usgs.gov/methods/news/across\\_the\\_board/atb\\_2.1.pdf](http://wi.water.usgs.gov/methods/news/across_the_board/atb_2.1.pdf)).**

**A position paper of the National Water Quality Monitoring Council Methods and Comparability Board, Technical Report 01-02, Web: <http://wi.water.usgs.gov/pmethods/PBMS/nwqmc.0102.pdf>. Other labs may join the NIST/NOAA round robin comparisons for a fee.**

**Analyses of contaminants in solids such as sediments or tissues can be even more difficult than similar analyses in water. Those in EPA who provide advice on fish tissue health advisories recommend that labs contracted should be involved in round-robin QA programs, such as that administered by NOAA in conjunction with its National Status and Trends (NS&T) Program (<http://www.epa.gov/ost/fishadvice/volume1/v1ch8.pdf>).**

**EPA's estuarine/marine EMAP program agrees with the modern consensus that performance based measurement based system (PBMS) approaches to lab selection are good, but should include round robin inter-lab comparisons (for more information see appendix V-A.2 and EPA recommendations at [http://www.epa.gov/emap/nca/html/docs/c2k\\_qapp.pdf](http://www.epa.gov/emap/nca/html/docs/c2k_qapp.pdf). The United States Geological Survey (USGS) has its own outside lab approval program, and the Department of Defense (DOD) has run similar checks of its own.**

**How to find your nearest friendly FWS contaminants specialist and why you should standardize with FWS SOPs for fish, wildlife and sediment analyses:**

If a network or Park is sampling toxic or hazardous contaminants, especially those that tend to accumulate in sediments, soil, fish, or wildlife, an effort should be made to standardize SOPs with the Fish and Wildlife Service, since they have large amounts of data nationwide from these media, not only from Wildlife Refuges but also from other locations ([http://www.fws.gov/chemistry/acf\\_ecdms.html](http://www.fws.gov/chemistry/acf_ecdms.html)). The FWS typically has contaminants specialists in every state. The FWS is a sister agency in the same sub-directorate of DOI as NPS, and the contaminants specialists are usually very helpful to parks regarding contaminants advice, study advice, how to collect and preserve sediment or tissue samples, etc. There is a step down process for finding your closest FWS contaminants specialist. For example, if one wants to find the contact for SD, first go to the national home page at <http://www.fws.gov/contaminants/Links.cfm> and then click on the region or state of interest. If looking for South Dakota contact, one sees that SD is part of FWS Region 6. One can then click on the region and then on staff on their home page to find the SD contact at <http://www.r6.fws.gov/contaminants/ecstaff.htm>. Using the same FWS-approved contract labs ([http://www.fws.gov/chemistry/acf\\_labs.html](http://www.fws.gov/chemistry/acf_labs.html)) and getting the same QA/QC, detection limits, etc. ([http://www.fws.gov/chemistry/acf\\_qaqc.html](http://www.fws.gov/chemistry/acf_qaqc.html)) would help ensure comparability with the

large FWS nationwide data base on metals, pesticides, herbicides, PAHs and other oil-related compounds, dioxins, PCBs, and other toxic chemicals in fish, wildlife, sediments, and soils.